Attorney Docket No.: 01P19662US

## IN THE SPECIFICATION

Serial No.: 10/053,369

At page 1, please replace the paragraph under the heading "Cross Reference to Related Applications" with the following amended paragraph:

The present application is related to co-pending U.S. Patent Application Serial No. 10/053,283 titled "SYSTEM AND METHOD FOR POSITIONING AN ELECTRONIC PORTAL IMAGING DEVICE," filed concurrently.

## At page 6, please replace the second paragraph with the following:

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To properly commission the medical linac, data must be collected under normal clinical conditions of the machine. This data must be collected at various depths with respect to the isocentric plane. A portal imaging system 90 according to embodiments of the present invention allows both commissioning the linac and measurement of patient exit dosimetry. More particularly, as will be explained in greater detail below, the portal imaging device platform 252 is adjustable in a vertical direction and, as such, is usable for both device commissioning and patient dosimetry. That is, as shown in FIG. 2, the portal imaging device platform 252 and the associated imaging panel is adjustable in a position A in the patient plane 8a, for use in commissioning the machine, and in a position B for use in dosimetry. While any suitable mechanism may be employed to adjust the imaging panel into position, one such mechanism is described in concurrently filed, co-pending U.S. Patent Application Serial No. 10/053,283, titled "SYSTEM AND METHOD FOR POSITIONING AN ELECTRONIC PORTAL IMAGING DEVICE," which is hereby incorporated by reference in its entirety as if fully set forth herein.

At page 6 (and continuing on page 7), please replace the last paragraph with the following:

FIG. 3 shows portions of radiation treatment device 2 and portions of treatment unit 100 in more detail. An electron beam 1 (also referred to as a radiation



beam) is generated in an electron accelerator 20. Accelerator 20 includes an electron gun 21, a wave guide 22 and an evacuated envelope or guide magnet 23. A trigger system 3 generates injector trigger signals ad and supplies them to injector 5. Based on these injector trigger signals, injector 5 generates injector pulses which are fed to electron gun 21 in the accelerator 20 for generating the electron beam 1. The electron beam 1 is accelerated and guided by wave guide 22. For this purpose, a high frequency (HF) source is provided which supplies radio frequency (RF) signals for the generation of an electromagnetic field supplied to wave guide 22. The electrons injected by injector 5 and emitted by electron gun 21 are accelerated by this electromagnetic field in wave guide 22 and exit at the end opposite to electron gun 21 as electron beam 1. Electron beam 1 then enters guide magnet 23, and from there is guided through a window 7 along axis 10. After passing through a first scattering foil 15, the beam goes through a passageway 51 of a shield block 50 and encounters a second scattering foil 17. Next, it is sent through a measuring chamber 60, in which the radiation dose is ascertained. If the radiation beam is an x-ray beam, the scattering foils are replaced by a target. A wedge filter 41 and aperture plates 42 and 43 can be provided in the path of radiation beam 1 such that the radiation is focused on the area to be irradiated. As noted above, this is just one example of a beam-shielding arrangement that can be used in the present invention.

## At page 13, please replace the last paragraph with the following:

As shown in FIG. 9, the main vertical drive assembly 254 is fixed to the telescoping boom 256 via one or more brackets 301 and a plate 303. The platform 252 attaches vertically to the main vertical drive assembly 254 via one or more hinges 304a, 304b. In operation, the platform 252 swings out horizontally on the hinges 304a, 304b, to receive radiation during both modes of operation. The platform 252 is typically stored vertically to save space. In addition, the plate 303 attaches to the main vertical drive assembly 254 via a plurality of fasteners, such as screws 305A 305a, which fit into

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screw holes 305 (FIG. 8B). In on embodiment six (6) screws are provided (two of which are obscured in the figure by the telescoping boom 256).

At page 14, please replace the second and third paragraphs with the following:



The physics cover 303 is then removed by removing the screws 305A 305a. As will be explained in greater detail below, this allows access to the mounting cavity 307. More particularly, as shown in FIG. 10, a "physics pin" 501c may be installed, to secure the platform 252 to the telescoping boom 256. In addition, bolts 502A 502a that secure the vertical positioner to the telescoping arm are removed. In on embodiment of the invention, four such bolts are provided, only three of which are visible in the figure.

As shown in FIG. 11, removal of the bolts 502A 502a allows the vertical drive assembly to move in the direction of the arrow 602. The presence of the physics pin 501A 501a means that the platform 252 is affixed to the telescoping arm. Thus, the vertical drive assembly 254 moves relative to both. Next, the bolts 502A 502a are replaced and the physics pin 501A 501a is removed. This fixes the vertical drive assembly 254 to the telescoping boom 256 in the physics position. Next, as shown in FIG. 12, the platform 252 may be deployed in a standby position by extending the panel along the hinges 301a, 301b.